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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,711	07/03/2003	Yoshifumi Kato	5000-5109	5026
27123	7590	10/15/2004	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			VU, PHU	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,711

Applicant(s)

KATO ET AL.

Examiner

Phu Vu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/2/02
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-11, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Leibowitz US Patent 4500173.

Regarding, claims 1 and 12 Leibowitz teaches a light-emitting element (figure 2 element 26) located between a reflective element (see figure 2 element 28) and an output element, wherein the reflective element reflects light that arrives at the reflective element, wherein the output element (see figure 2 element 14) permits transmission of outside light that arrives at the output element, and wherein the output element outputs outside light reflected by the reflective element and light emitted by the light-emitting element. Leibowitz also teaches a scattering portion ("diffuser layer" see figure 2 element 32) element located on the between the reflective element and the output element, wherein the scattering portion scatters light that arrives at the scattering portion. **Further regarding claims 12 and 19**, Leibowitz also teaches a display comprising the lighting-element (see abstract), the display unit (display portion) located on top of the lighting unit (see column 5 lines 50-51) and a display unit displaying an image (column 5 lines 51-55). **Further regarding claim 19**, Leibowitz teaches the

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scattering portion ("diffuser layer" see figure 2 element 32) is located between the light emitting element and the output element.

Regarding claim 2, Leibowitz teaches the scattering portion ("diffuser layer" see figure 2 element 32) is located on part of the lighting system other than the reflective element.

Regarding claim 3, Leibowitz teaches the scattering portion ("diffuser layer" see figure 2 element 32) is located between the light emitting element and the output element.

Regarding claim 6, Leibowitz teaches the light system further comprises a substrate (see figure 2 element 28), wherein the light-emitting element (figure 2 element 26) is located between the substrate and the output element (see figure 2 element 14).

Regarding claim 7, Leibowitz teaches "the light-emitting element" is formed as a sheet introduces a product by process limitation. Claim 7 introduces no new structural limitations and the patentability is determined on the product itself. See MPEP 2113[R-1]

2113 [R-1] Product-by-Process Claims
PRODUCT-BY-PROCESS CLAIMS ARE NOT LIMITED TO THE
MANIPULATIONS OF THE RECITED STEPS, ONLY THE STRUCTURE
IMPLIED BY THE STEPS

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."

Regarding claim 8 and 17 Leibowitz teaches the light-emitting element is an electroluminescent element (see column 5 line 36).

Regarding claim 9, Leibowitz teaches the reflective element and output element (transparent image electrode) are electrodes (see column 5 lines 30-38), and wherein the electroluminescent element performs electroluminescence when a voltage is applied to the electrodes (see column 5 line 62 – column 6 line 3).

Regarding claim 10, Leibowitz the entire electroluminescent element emitting light when a voltage is applied to the electrodes is inherent to electrodes performing electroluminescence when a voltages is applied to the electrodes.

Regarding claim 11 and 18, Leibowitz does not disclose an organic electroluminescent material it is conventional in the art to use an organic electroluminescent material. Conventionality has associated benefits including proven effectiveness, steady supply chains, and reduced costs. Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to use an organic electroluminescent material because this allows for all the benefits of conventionality.

Regarding claim 13, Leibowitz does not explicitly teach a plurality of liquid crystal elements, however Leibowitz does teach a liquid crystal display using the lighting unit (see abstract) and to one of ordinary skill in the art a plurality of liquid crystal elements is inherent to a liquid crystal display.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

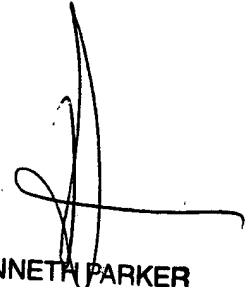
Claims 5, 15, 16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leibowitz as applied to claims 1 / 12 / 16 / 19), and further in view of Iwata et. al US Patent No 6,111,699. Leibowitz discloses all the limitations of claims 5, 15 16 and 19 except a scattering portion is a layer, which includes scattering bodies, and wherein the scattering bodies are minute particles and further regarding claims 16 and 19 Leibowitz also does not disclose an adhesive wherein the layer attaches the lighting unit to the display unit and wherein the adhesive unit includes scattering portions. Iwata discloses an adhesive layer (cover figure element 16), wherein the adhesive layer includes scattering bodies, wherein the scattering bodies are minute particles (see cover figure element 14) used to reduce the number of layers (see column 10 lines 37-40) required thereby reducing the thickness and costs. Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to add use a adhesive with light scattering bodies disposed in, because this reduces the number of layers required thereby reducing thickness and costs.

Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leibowitz as applied to claims 1 / 12 above and further in view of Savant US Patent No 6,113,801. Leibowitz discloses all the limitations of claim except the scattering portion is an interface between two of the elements of the lighting unit and wherein the interface has scattering bodies, and wherein the scattering bodies are minute concavities and convexities (see figure 1A – 1F) and Savant also discloses a light scattering portion wherein the scattering bodies are minute concavities and convexities for easy uniform replication independent of the production scale (see

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column 2 lines 11-15). Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to use a scattering portion with concavities and convexities because it allows for uniform replication at low costs for high and low-scale production.

pm


KENNETH PARKER
PRIMARY EXAMINER